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METALLIC Construction *for the* Modern HOME





APR 21 1924



When You Build Your Home, Build Well!

YOUR own Home! For months—or years—you probably have planned the Home you desire to build, until it has become quite real to you.

Your home will therefore, as nearly as possible, reflect your personality. It will be the place where a great part of your time will be spent; it will be the background of the developing minds of your children. In your imagination you picture it always as new, bright and comfortable, and in good taste.

Your family and friends will share this atmosphere of individuality and refinement which you will build into your home. And you want to make this home of yours not only attractive and built so as to be easily kept that way, but also secure against deteriorating elements—safe from all the hazards of fire.

Before you build, you will be interested to see what Milcor Methods and Materials can accomplish in the attainment of your ideals, at a sensible cost! Homes built with Milcor Metallic Products are distinctive. Their rooms *remain* new and attractive in appearance. They possess character—refinement! They are fireproof, crackproof and sanitary. Economical, too, in first cost, as well as presenting the immense advantages of minimum upkeep expense during years to come.

Of particular appeal is the ease with which Milcor-made rooms can be kept spick-and-span. This consideration is among the most important to the Wife who knows only too well the problems ordinarily attendant on the task of keeping the home clean and attractive.

*"In the elder days of Art,
Builders wrought with greatest care
Each minute' and unseen part;*

*Let us do our work as well,
Both the unseen and the seen."*

*From Longfellow, in
"The Builders."*



MILCOR Stay-Rib Lath Insures Permanence

NO other materials can take the place of the Milcor Line. The invention of these products in metal, marked the beginning of a new era in fine home construction.

The practical advantages attained through the use of Milcor Metal Products are endorsed by leading Architects, Contractors and Engineers everywhere.

Among the Milcor Products which should be of particular interest to every family contemplating the building of a Home, are:

1. Milcor Stay-Rib Metal Lath.
2. Milcor Netmesh Metal Lath.
3. Milcor Expansion Corner Beads.
4. Milcor Expansion Door and Window Casings.
5. Milcor Expansion Base Screed.
6. Milcor Concealed Metal Picture Molding.

MILCOR Stay-Rib Metal Lath

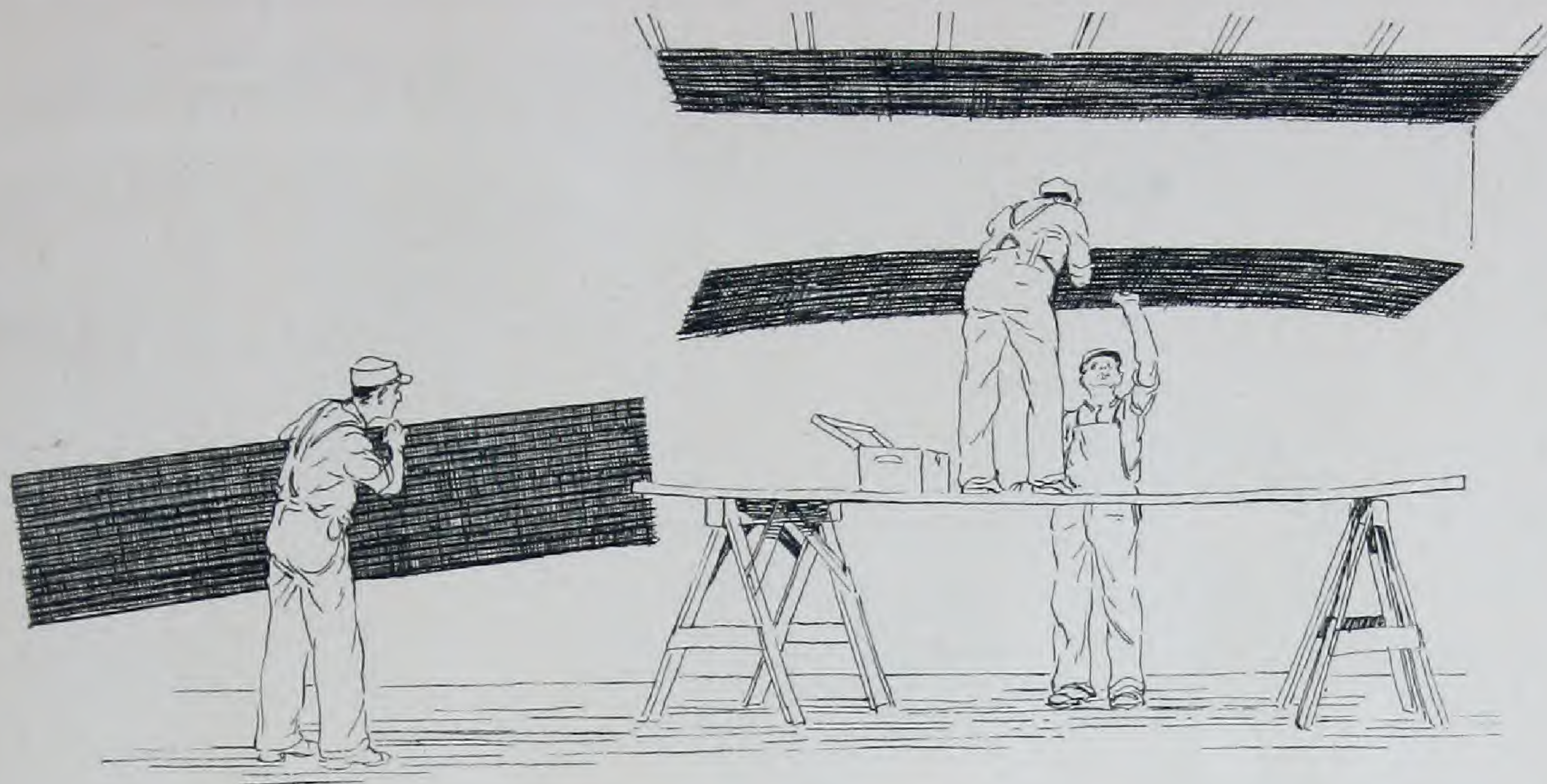
—a rigid, perfect base for plastering

The superiority of metal lath as compared to wood lath, cannot be doubted. But the invention of the *original* metal lath was just the first step toward the crackproof, fireproof, permanent, plastered type of wall which is made possible today through the development of Milcor refinements in Stay-Rib Metal Lath.

Greater rigidity was essential. Milcor Engineers experimented with many designs in expanded metal—various sizes of meshes, ribs of different heights and spacings. The ideal result, for rigidity and for plastering grip, was secured in the Milcor Stay-Rib design.

The solid metal ribs are spaced 1½ inches, center to center, and are interconnected at ¼-inch intervals by narrow strips, or bridges. The strips, in turn, are reinforced strongly at their centers by a stiffening member. The angle and spacing of the strips is such that efficient plastering, without waste, is greatly facilitated.





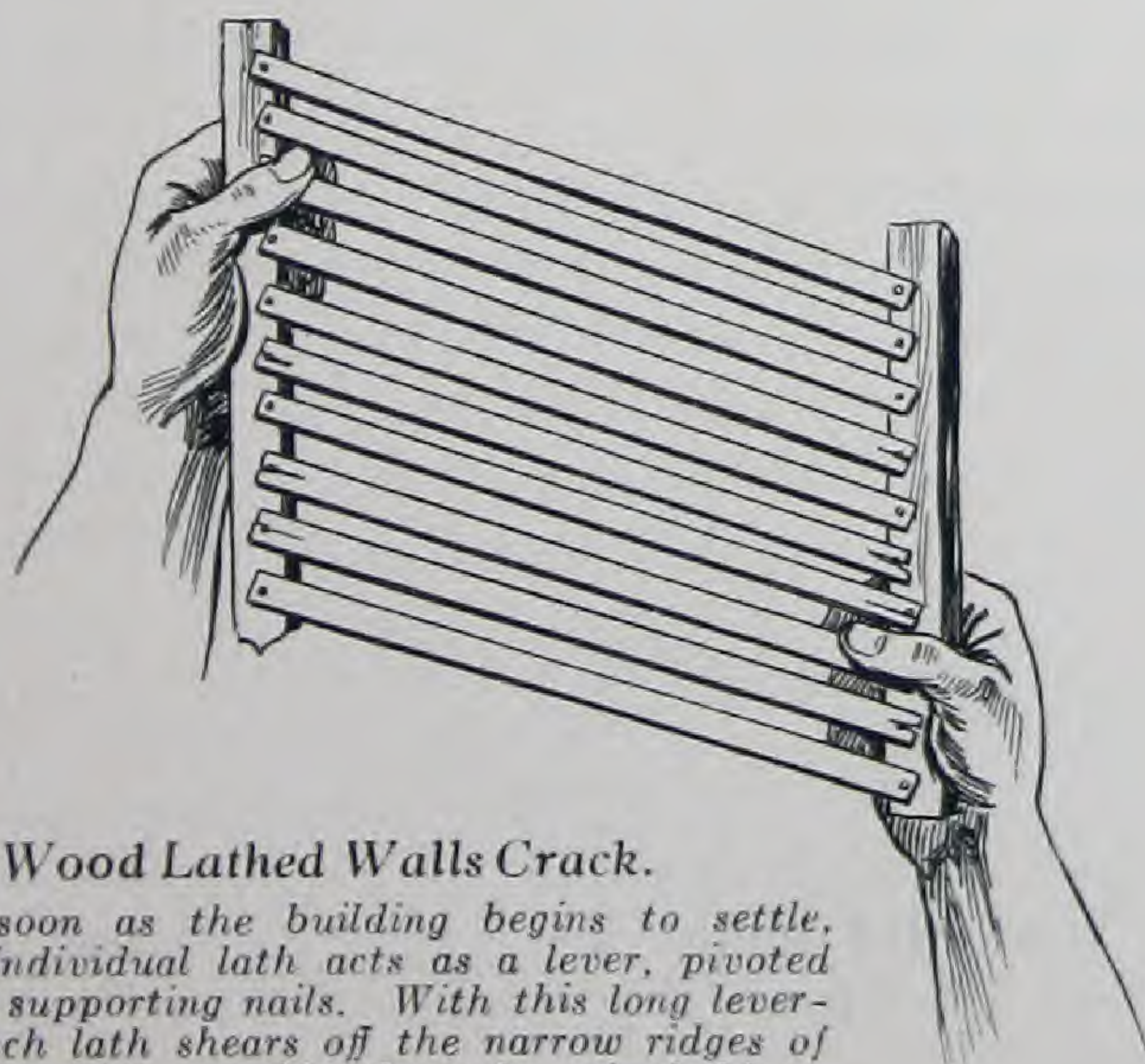
The rigidity of this lath permits wider spacing of studs or supports. You benefit by better construction without increased cost.

In much the same manner as concrete is reinforced by steel, plastered walls on a Stay-Rib base are actually steel-reinforced. When the plasterer applies the mortar to the lath, the slightest pressure from his trowel forces the mortar through the metal meshes. The plaster hardens, permanently "keyed" to the lath—a wall that will never chip, crack, warp or "stripe" the way wood-lathed walls usually do. In sound-proofness and in fireproof qualities, Milcor Metal Lath construction is without equal.

Large sheets of Milcor Stay-Rib, with an area of 16 square feet, may be applied to the wall studs in one operation. This results in an important saving over the laborious method of fastening wooden laths one at a time. Furthermore, the Stay-Rib mesh is such that "scratch-ing in" and "doubling back" (as plasterers call it) can be done from the same scaffold—practically two-coat work, at a big saving.

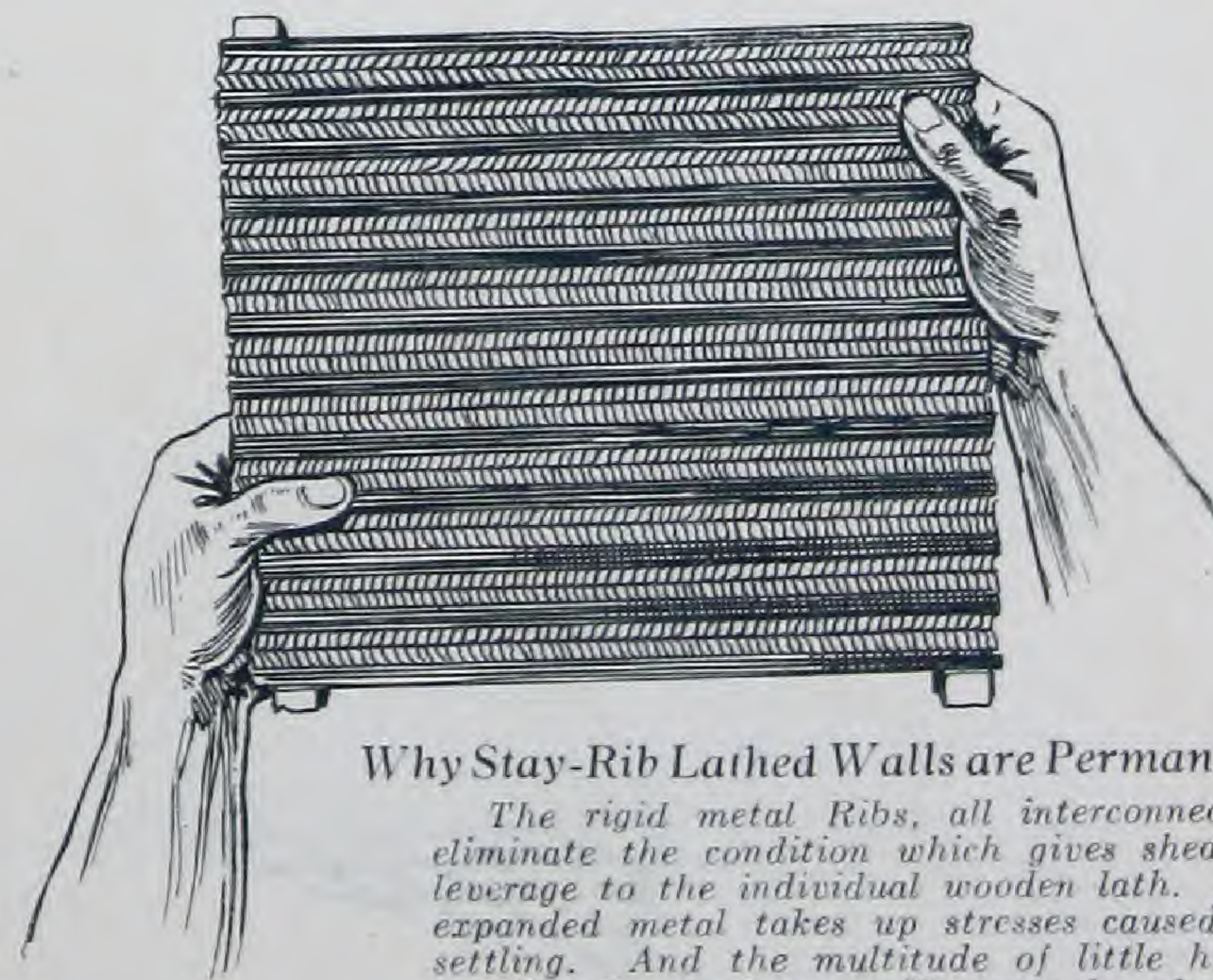
Walls of greater strength may be made as "thin" as 1½ or 2 inches by the Milcor Method. Space is saved—larger rooms are obtained from a given area. And through combined use of Milcor Metal Products finer artistic effects, greater comfort, firesafeness and maximum permanence can be built into your Home.

The rigidity of Milcor Stay-Rib Metal Lath makes it easily handled in large sheets—8 feet long by 2 feet wide. Labor costs for erection are thus reduced to the minimum. Wider spacing of studs is also possible because of this rigidity—this means fewer studs, less material and labor.



Why Wood Lathed Walls Crack.

As soon as the building begins to settle, each individual lath acts as a lever, pivoted on its supporting nails. With this long leverage each lath shears off the narrow ridges of plaster which provide the only grip-hold on the wood. Naturally, the loosened wall cracks, bulges, sags or falls off completely.



Why Stay-Rib Lathed Walls are Permanent.

The rigid metal Ribs, all interconnected, eliminate the condition which gives shearing leverage to the individual wooden lath. The expanded metal takes up stresses caused by settling. And the multitude of little hooks or "keys" of plaster will never be sheared off by the metal strands. Milcor Metal Lath keeps the plaster background intact.

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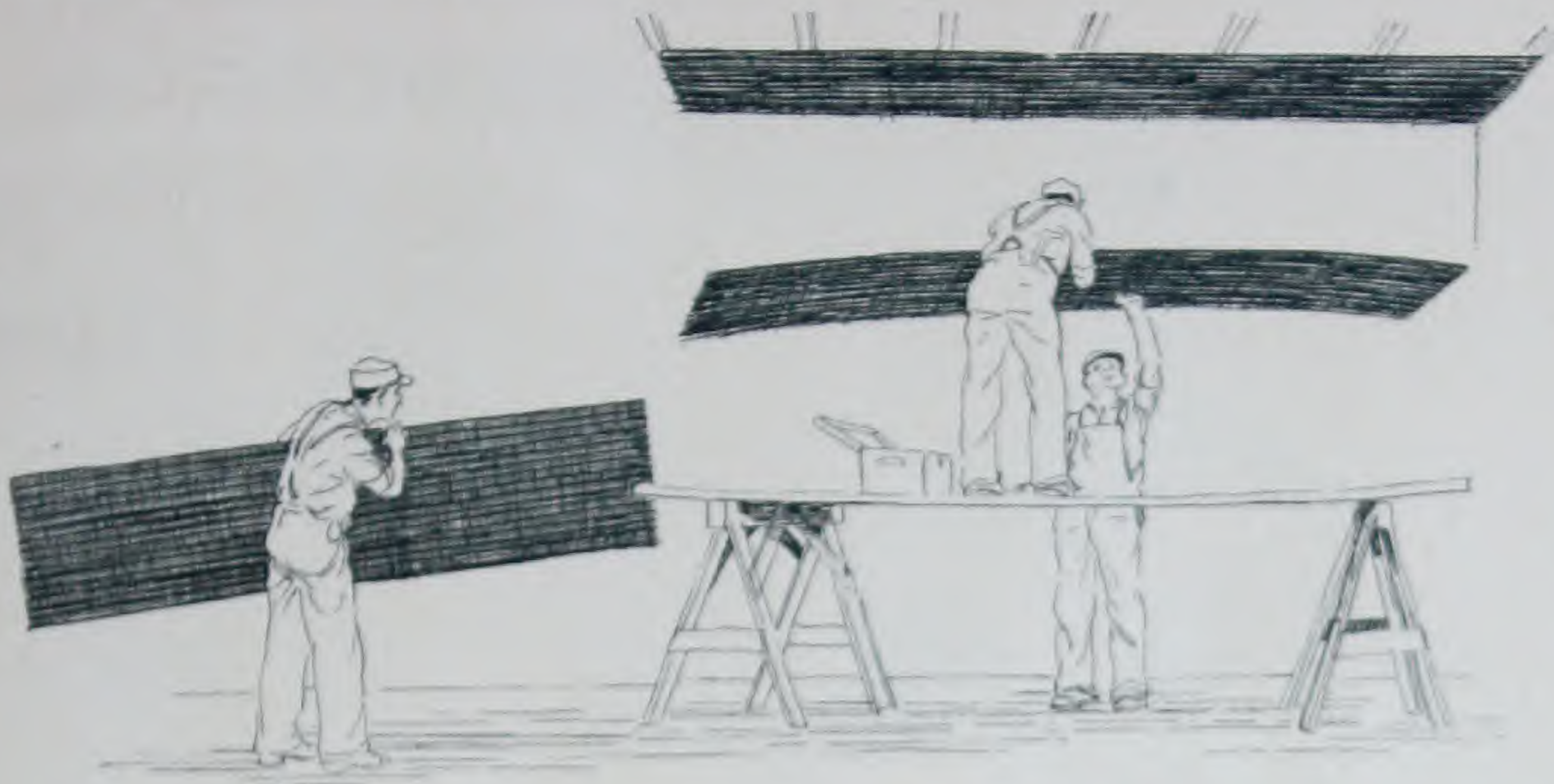
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The solid metal Ribs are spaced 1 1/4 inches, center to center, and are interconnected at 1/4-inch intervals by narrow Stays, or Strands. The Stays, in turn, are reinforced strongly at their centers by a stiffening member. The angle and spacing of the Stays is such that efficient plastering, without waste, is greatly facilitated.





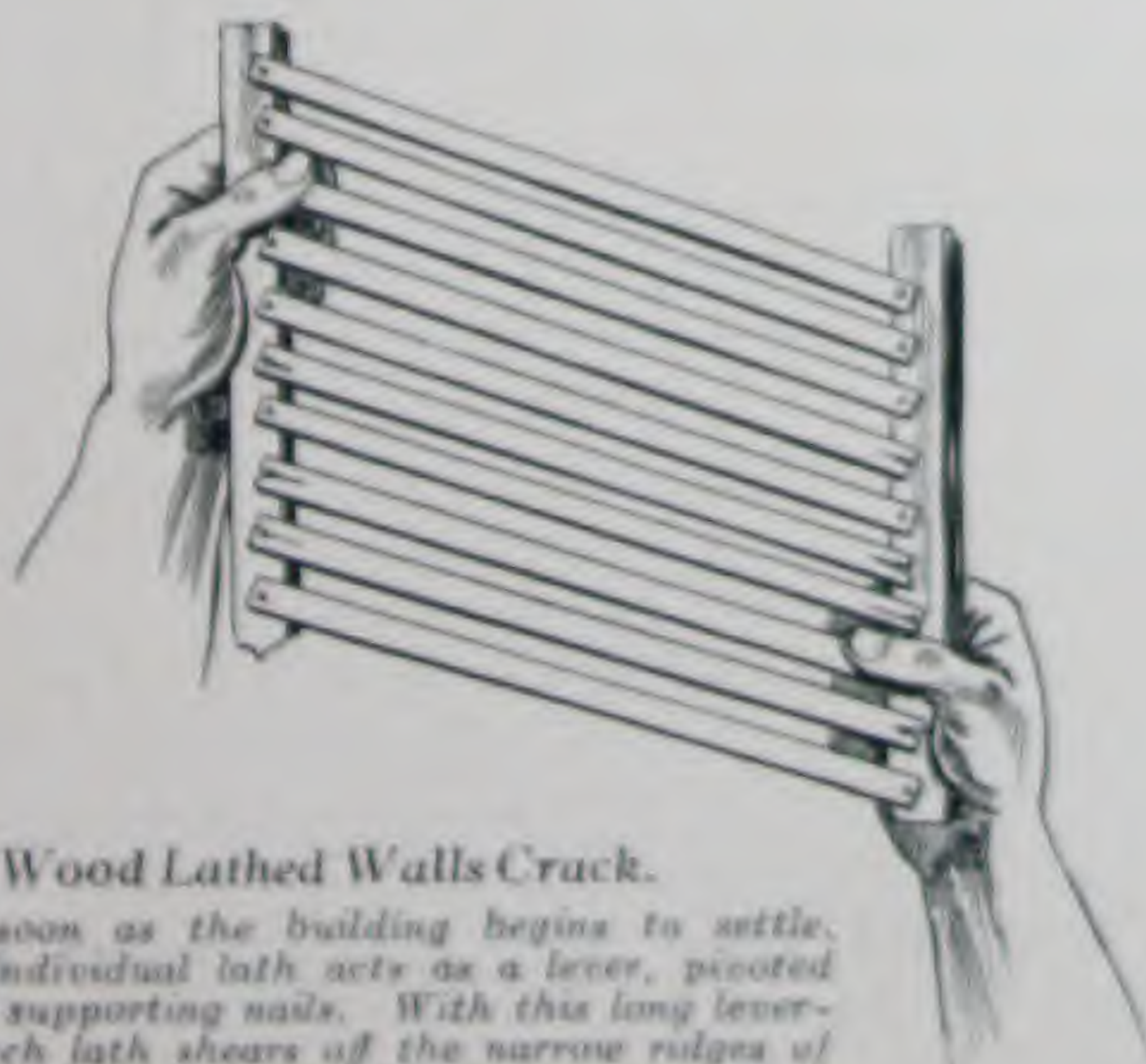
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MILCOR Expansion Corner Beads

ASIDE from your desire to *live* in a home that will retain its original appearance of newness for long years to come, there is another practical angle deserving of your consideration.

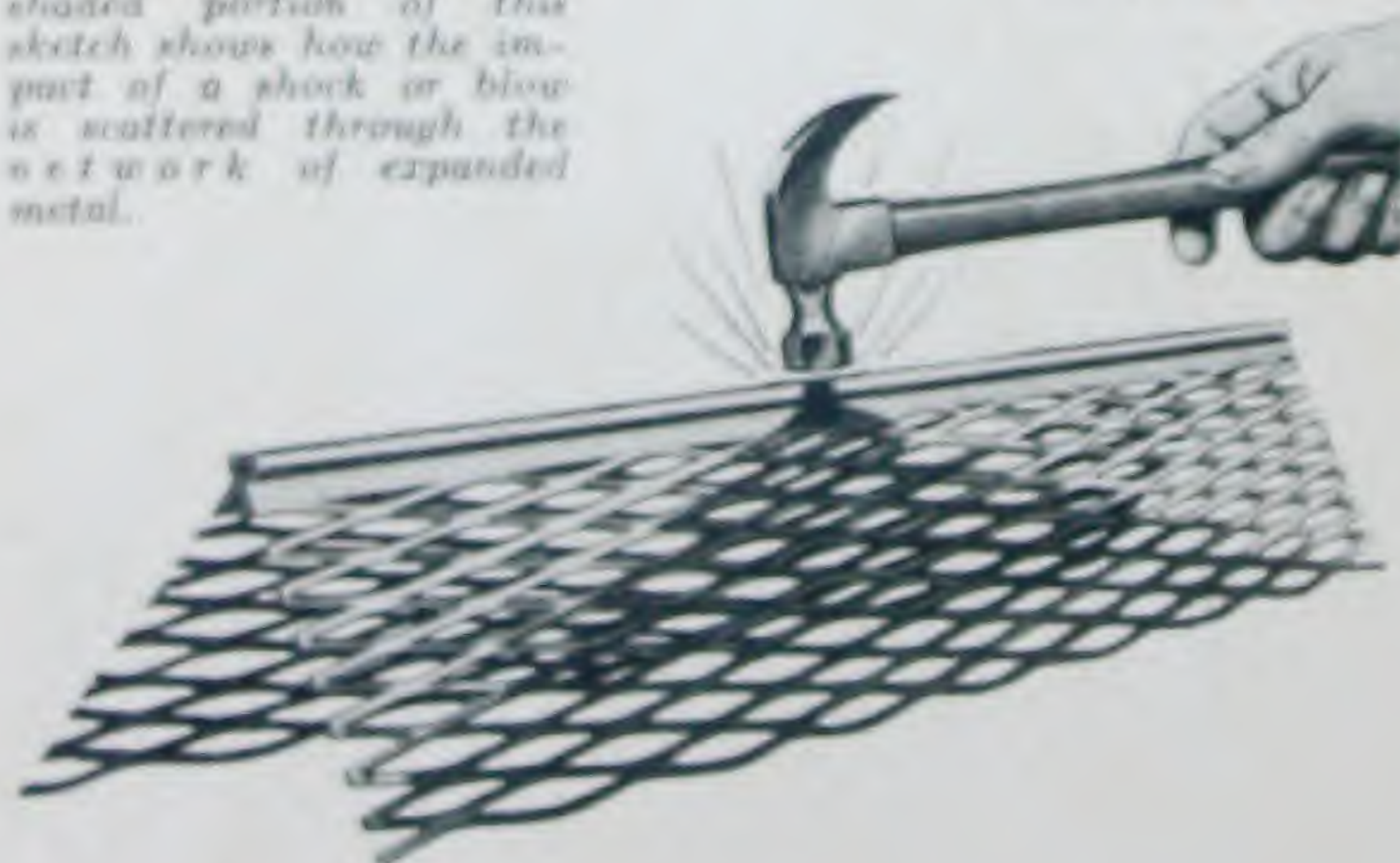
Some day you may want to sell this Home!

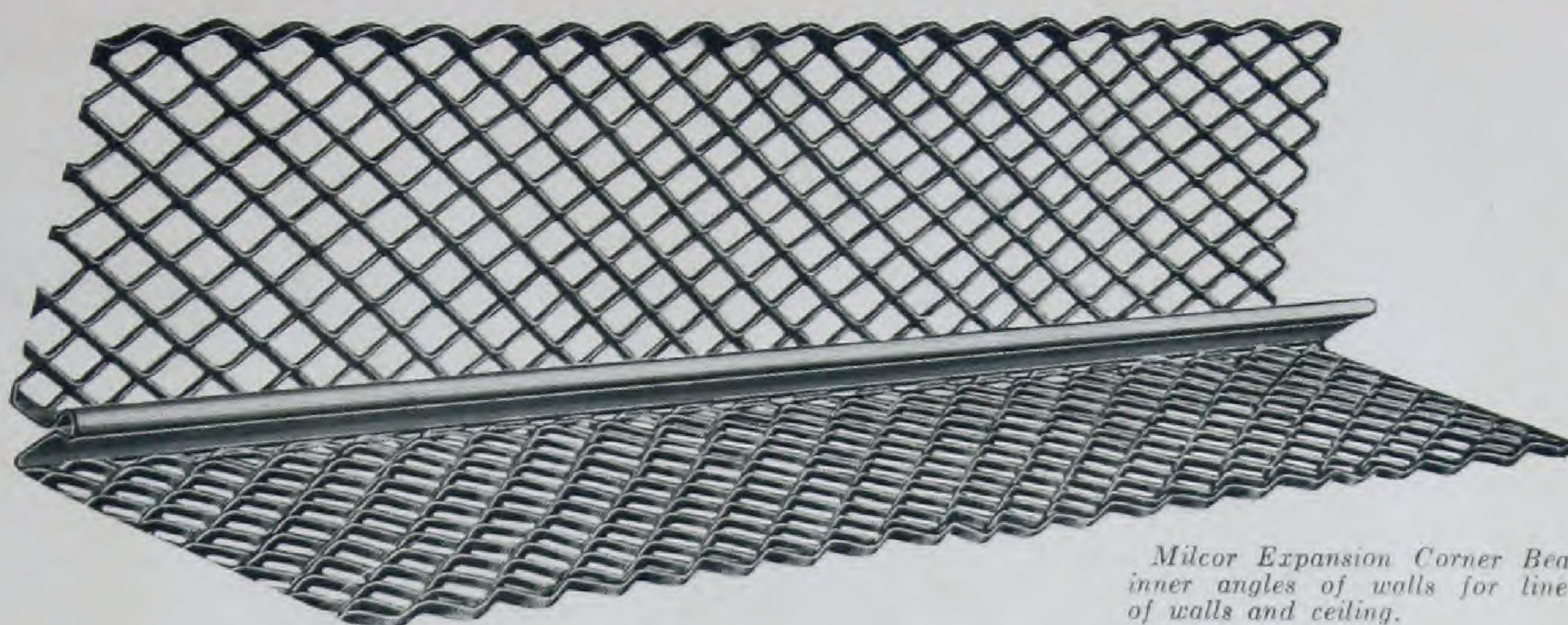
Prospective buyers will critically inspect the walls. Plaster cracks, broken corners, cleavage cracks at inner angles of walls or ceilings or around door and window casings, would seriously effect the price you would like to get.

So guard against that possibility. Have all corners and angles in your Home protected by Milcor Expansion Corner Beads. They will withstand the most severe abuse. The crash of furniture or of childrens' carts or toys, which would chip ugly chunks from the ordinary plastered corner, will leave no tell-tale marks on the Milcor-made corner! The network of diamond-shaped expanded metal in Milcor Expansion Corner Beads, reinforces the plaster at these particularly vulnerable points. The force of blows or shocks is scattered by this metal mesh. No one particle of plaster gets undue strain. The solid metal bead acts as armor plate in warding off blows that would ordinarily prove destructive.

Corner cracks caused by settling of a wood-lathed

Never does the direct force of any corner blow get to the wall if the corner is protected with Expansion Corner Bead. The shaded portion of this sketch shows how the impact of a shock or blow is scattered through the network of expanded metal.





Milcor Expansion Corner Bead No. 2 for inner angles of walls for line of juncture of walls and ceiling.

structure will be avoided in your Home if Milcor Expansion Corner Bead and Metal Lath are used. When a wood-lathed building settles, the lath at the corner of two adjoining walls are free to move independently of each other. The plaster, under such strains in opposite directions, naturally cracks along the corner, the point of concentration of the "shearing stress" of these opposing forces.

Milcor Expansion Corner Bead prevents this. Even when applied to walls of wood lath or of other construction, Expansion Corner Bead affords greater protection than any other corner reinforcement known.

Precisely straight-lined corners, which will add a plain, quiet touch of beauty to the rooms of your Home, are made certain with this ideal Corner Bead. The solid metal bead is formed by "cold drawing" the steel—a process which insures true lines. The plasterer likes this straight-line corner, for it gives him a positively reliable guide to work to in getting his wall surface perfectly flat and even.

The solid metal bead extends out to the surface of the plaster at either inner or outer angles. The expanded metal wings extend in under the plaster, which "keys" through both the wings and the lath beneath, uniting them in a permanent bond and doubly reinforcing the corner.

The ease and speed with which Milcor Expansion Corner Beads may be erected is an item worth your attention. They can be wired, stapled or "stuck" in place, quickly and securely. This saving in labor usually more than offsets the slight extra cost of this unequalled Corner Bead.

In this important detail, again you benefit by receiving more permanent construction without extra expense, because of reduced labor costs with Milcor Metallic Products.

Statistics indicate that the average fire is reached by modern fire-fighting apparatus within fifteen minutes after the blaze starts. The Fire Underwriters' Laboratories have set a One Hour Rating on Metal Lath construction—this rating resulted from tests proving that even a severe fire is confined for at least one hour to the room in which it originates if that room has metal-lathed construction.





The fire resistance afforded by the Milcor Metal Lath method of construction is the most important factor for you to consider. The fact that the Underwriters' Laboratories have placed a "One Hour Rating" on metal-lath-plastered walls and partitions, even when used over woodstud construction, is impressive evidence of the fire protective qualities of Milcor Metallic Products.

The "One Hour Rating" means that even a severe fire would be confined, for at least one hour, to the room in which it started. Statistics show that the first fifteen minutes are the most critical in the average fire—if the fire has failed to spread and has not obtained a "foot-hold" by that time, it will be mastered without much damage.

Milcor Metal-lathed walls give at least *four times* that amount of protection, even with *severe* fires. That explains why Milcor lathed homes are actually *fire safe*.

Fifteen thousand lives are sacrificed annually on the altar of the Fire Demon in the United States and the monetary loss is upwards of Five Hundred Million Dollars.

Build your Home *fire safe*. Milcor Materials and Methods make safe construction available without prohibitive expense.

Milcor Expansion Base Screed.

Instead of the old style wooden base board, concrete is widely used. To obtain a precise line of separation between plastered wall and cement base, Milcor Expansion Base Screed is the correct thing to use. It provides a flush, inconspicuous base line and its expanded metal wings bind and reinforce both the cement and the plaster inseparably. See illustration Page 7, showing Milcor Expansion Base Screed (B and B 1), Casing (A), and Netmesh Metal Lath (C).



Less labor time is required for the erection of Expansion Corner Bead. There is such a multitude of openings that the workman can use, staple or "stuck" the corner bead in place more quickly than is possible with any other type.



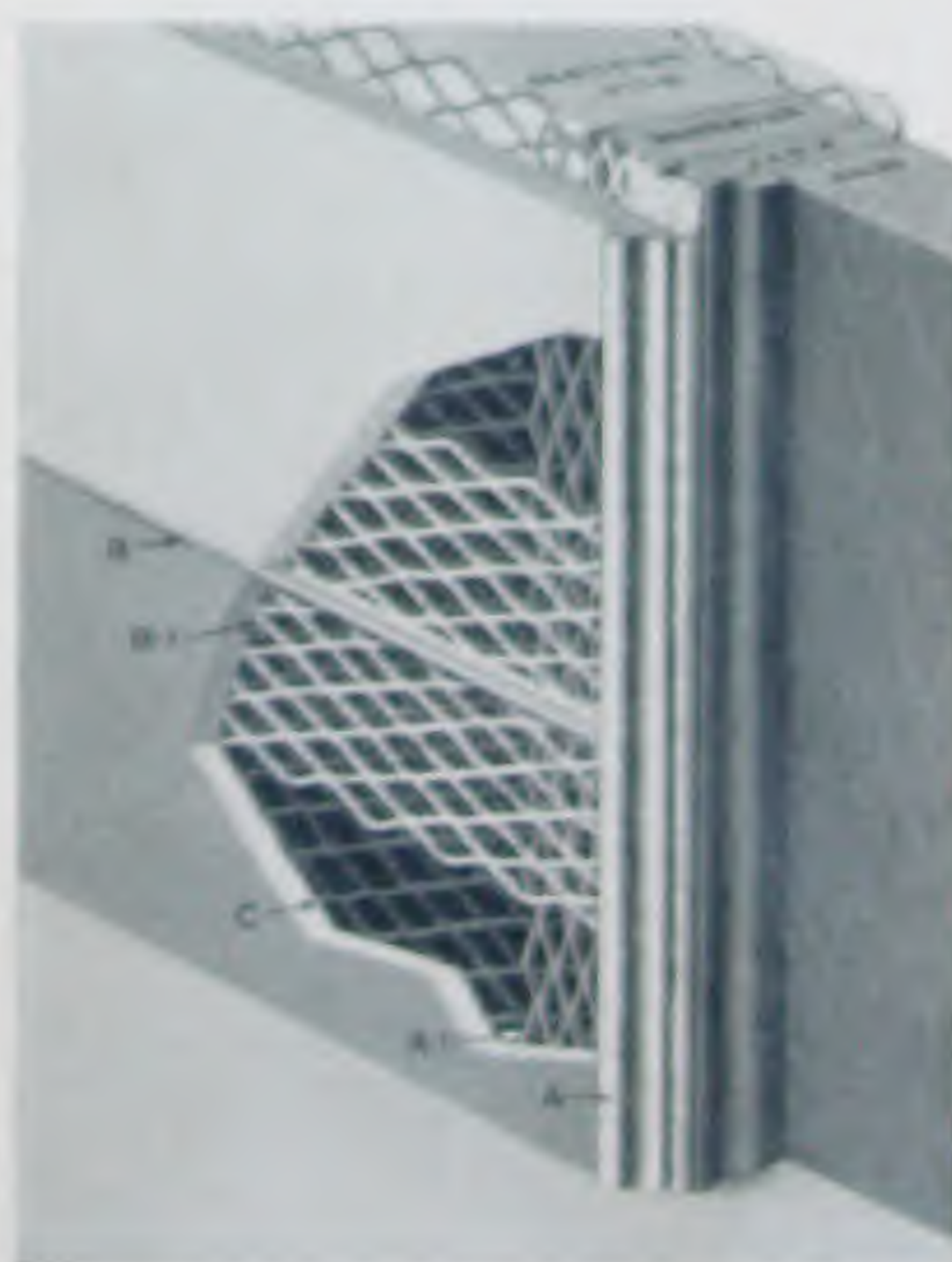
MILCOR Expansion Door and Window Casing

TRULY a great achievement was the invention of Milcor Expansion Casings. New in style and artistically correct, sanitary, fire-safe, economical and *everlasting*, these distinctively new expanded metal casings certainly have important advantages over old-fashioned, clumsy, expensive wooden casings or solid metal casings.

Where Milcor Expansion Casings are used, the slamming of doors or windows, or blows from objects passing through doorways, will not result in the ugly wall-cracks which are almost certain to develop eventually around doors and windows trimmed with wood or other types of casings. Neither will the exposed, solid metal molding of Expansion Casings ever become scuffed up or marred the way wooden casings usually are, after a few months use.

Embedded right in the plastered wall, (as Expansion Casings are) with their network of expanded metal producing a permanent bond to the wall-base, there cannot possibly be any separation cracks between casing and wall. But with wooden or solid metal casings, such separation cracks are certain to develop, because the plaster has no grip-hold on such casings. As soon as separation cracks occur, they offer an ideal harbor for dust and vermin—an unsanitary condition which is practically incombustible. *Avoid it in your Home* by demanding Milcor Expansion Casings. They are easy to keep immaculately clean! Just an inch of metal surface to rub a cleaning rag over occasionally. House cleaning work is greatly relieved in Milcor-trimmed Homes.

The perfect, sanitary, modern wall, showing Expansion Metal Casing, Expansion Base Scribed and Network Metal Lath.
You can readily see how plaster will key through this entire network of metal and securely bind all permanently together.





The only exposed part of the Milcor Expansion Casing is a neat, solid metal molding, about one inch wide and three-quarters of an inch deep. The beautiful simplicity of this casing-molding permits the most desirable sort of architectural effects and adds an indescribable charm and an air of refinement to the general appearance of rooms that are Milcor trimmed. Three styles of molding are available—see the “profile” sketches on page 9.

Just compare the clumsy, old-fashioned, six-inch wooden casing with this neat, narrow, metal band, flush with the plastered wall-surface. The contrast from the standpoint of appearance alone is so strongly favorable to the Milcor Expansion Casing that most people who get a good conception of this modern metal product are not satisfied with any other type of casing. Then when you consider the economy and many practical advantages gained through Milcor Expansion Casings, in addition to their pleasing appearance, you will appreciate the reason for the increasing popularity of this improved method of trimming doors and windows.

For permanence as well as for better artistic effects, for exterior or interior work, Milcor Expansion Casings are supreme. They can never warp; they are fireproof and wear proof; they lend themselves nicely to distinctive color schemes, finished in the same tone as the wall or in a shade or two darker, to harmonize with the decorative motif.

Exterior Expansion Casings fabricated from Pure Zinc or Pure Cold Rolled Copper are recommended particularly for trimming of doors and windows in stucco construction. The immunity these materials possess against corrosion make them ideal for this purpose. Galvanized steel Expansion Casings are generally used for interior trim, although zinc or copper are also recommended highly for interiors.

Not only have Milcor engineers provided this perfect Door and Window Casing, but they have also invented a special clip, or lock, by means of which the erection of Expansion Casings is greatly facil-



Milcor Expansion Casing broken away to show how it is locked tightly with metal clips to the wooden jamb of door or window. These clips become buried in the plaster and the Casing is thus permanently fastened—cannot pull away.



Rooms built with Milcor Expansion Casings and other Milcor Products always look new and are easily kept immaculately clean.

itated. This patented Casing fastens in under the solid metal-molding, securely locks the casing to the door jamb and is entirely out of sight when the wall is completed, embedded in the finished plaster. This is a little detail, but *important*, for it eliminates any chance for any portion of the casing to separate from the door or window jamb.

The Three Styles in Expansion Casings



No. 4— $\frac{1}{4}$ Round.



No. 6—O. G.



No. 8—O. G.—24 Gauge.

Investigate the initial cost of Milcor Expansion Door and Window Casings as compared with hardwood casings. Consider the freedom from upkeep expense and the saving in labor-cost of erection. You'll find it pays well to specify this ultra-modern type of construction.

*Be Sure You Are Right,
Then Go Ahead.*

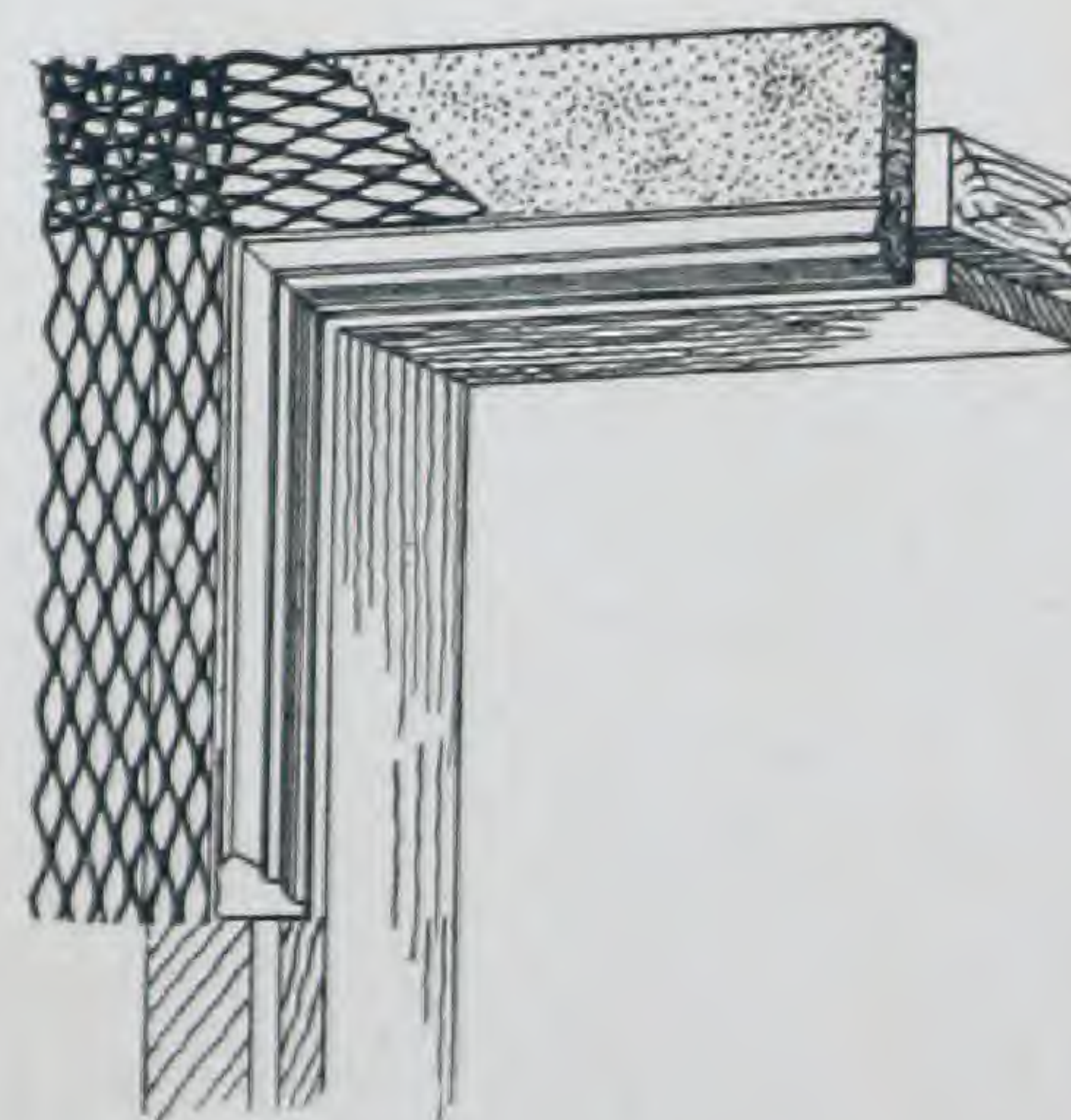
No man can get very far into plans for building a home for his family, before realizing that he is embarking on one of the greatest undertakings of his life.

The building of a home deserves the most serious consideration of modern construction methods and materials.

Be sure you are right *before* you start. The pleasure and advantages of owning your own home may be lost through worry about poor construction. Have your building—

“... wrought with greatest care
Each minute' and unseen part.”

Most of these Milcor Products will be unseen in the finished structure. But in years to come, you will be mighty glad they are there. Build so that your Home *remains* new!



The expanded metal wing provides a multitude of grip holds for the plaster, right up to the base of the casing. The overlapping wings at corners add still more strength to this sturdy construction. Note that the mortar flows in under the solid metal molding where it hardens into form and prevents any possibility of marring or indenting the molding.



MILCOR Netmesh Lath Ideal for Curves

ONE of the important features of Milcor Netmesh Metal Lath is its flexibility, which makes it ideal for use on curved surfaces, arches, ornamental plastering formations and other work requiring metal lath that can be precisely formed to fit unusual curves or angles of walls or ceilings.

Netmesh lends itself well to such forming and requires no special bending-equipment.

The ability of Netmesh Metal Lath to scatter the force of shocks or blows, is unequalled. The network of expanded metal dissipates the force so completely that walls plastered on this Milcor Product are crackproof to the highest degree.

The expanded diamond texture of Milcor Netmesh Lath permits the mortar to work through very easily and to form a perfect series of "keys" in hardening around each of the metal strands.

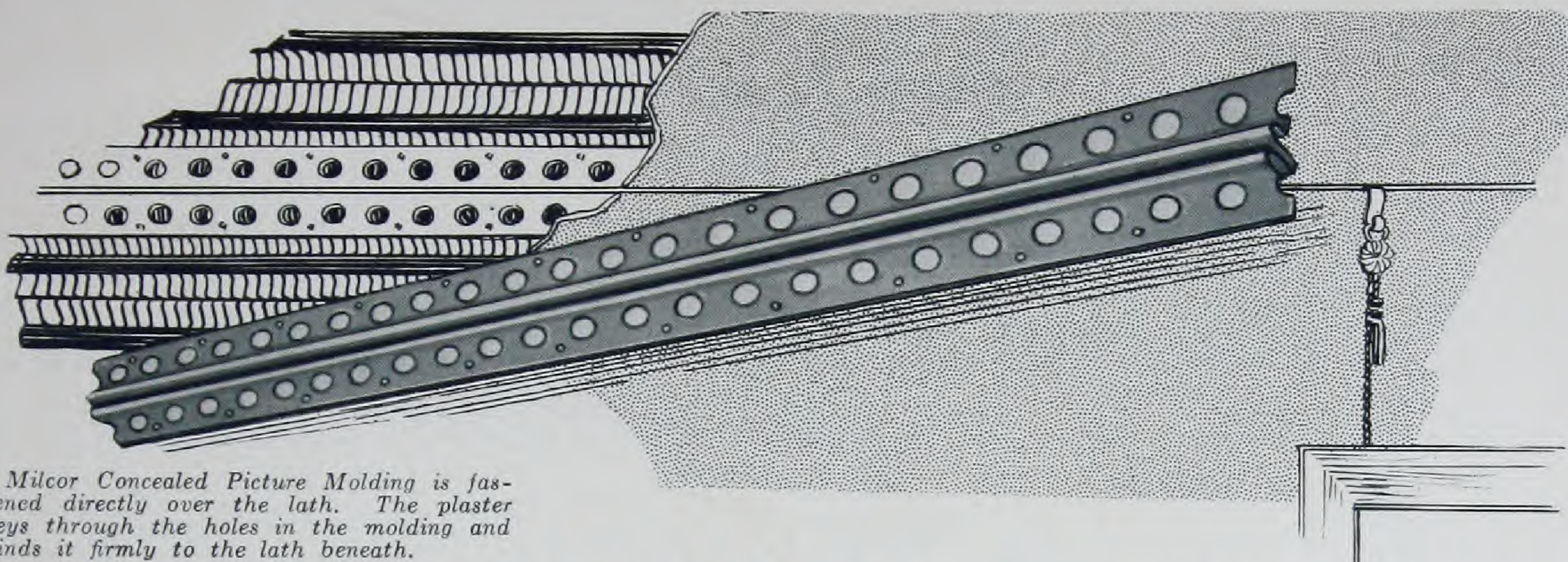
Milcor Netmesh is particularly strong and dependable because of the Milcor Process of formation. Special machinery cuts short slits in the metal sheet; following that operation, automatically, the same machinery stretches the slit sheet, expanding it over little diamond-shaped dies. This process results in small, accurately formed, diamond apertures, which have been proven most desirable for the best plastering on this type of lath.

The fireproof and sound proof qualities which are such valuable attributes to the success of all Milcor Metal Lath, also prevail in Milcor Netmesh. This lath is particularly well adapted to formation of "Firestops"—basket shaped receptacles, placed at floor lines between all partitions, filled with plaster or other noncombustible material, to block air currents and thus to preclude possibility of fire being fanned into destructive flames between partitions.

Insist on Milcor Netmesh "Firestops" throughout your Home.

Notice how completely the tongues of plaster work through the diamond shaped openings of Milcor Netmesh Lath. This metal lath actually becomes embedded in the plaster—it acts as a steel reinforcement—the plaster is permanently "keyed" to this lath regardless of the curve or angle of the plastered surface.





Milcor Concealed Picture Molding is fastened directly over the lath. The plaster keys through the holes in the molding and binds it firmly to the lath beneath.

MILCOR Concealed Picture Molding

SINCE the perfection of Milcor Concealed Metal Picture Molding, the old fashioned, protruding wooden picture molding is no longer in vogue.

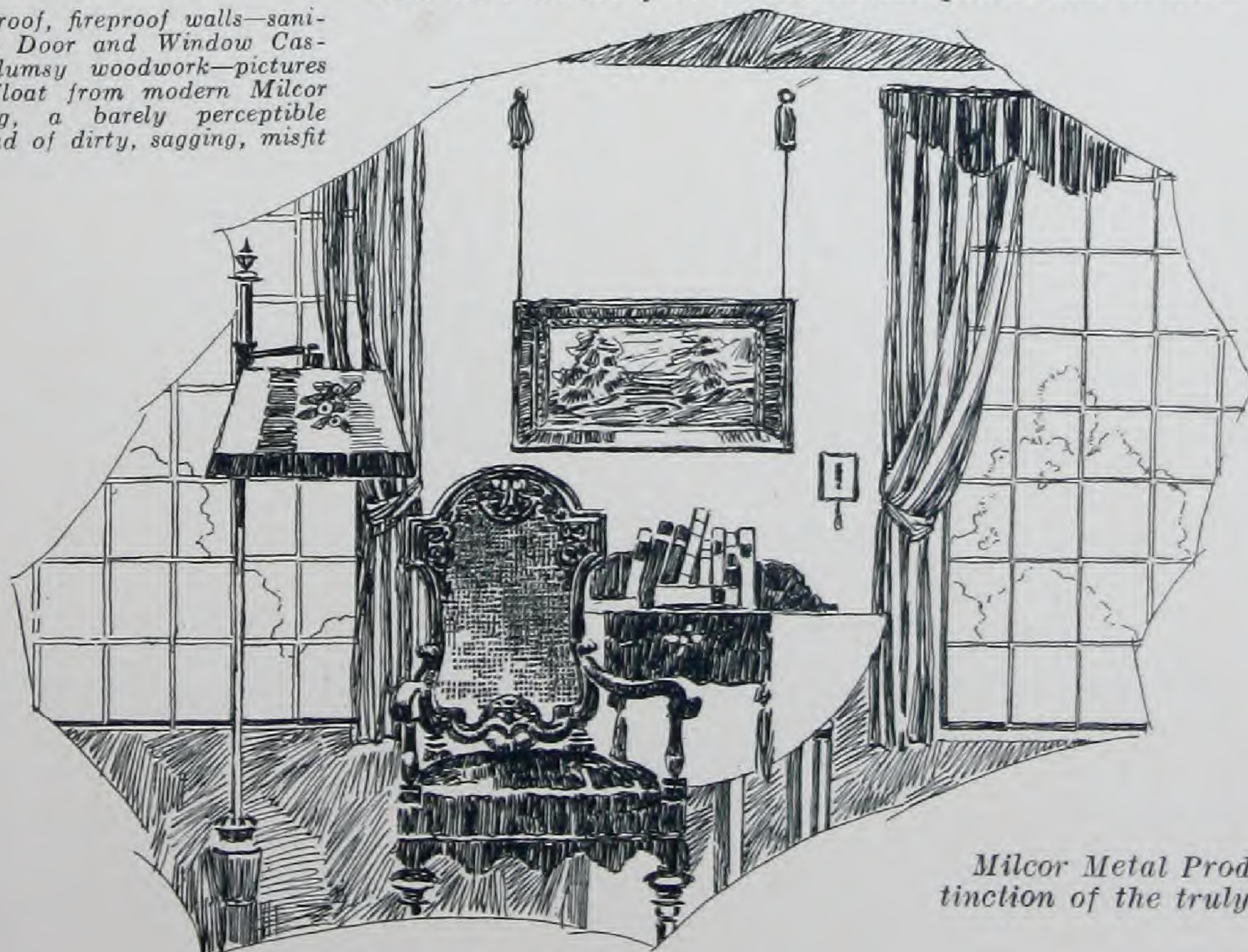
This new style metal molding, embedded firmly in the plastered wall not only improves the appearance of the room because of its inconspicuousness, but at the same time provides a staunch support for pictures, tapestries, mirrors or other wall decorations.

Dust and vermin cannot collect on Milcor Concealed Picture Molding. The plaster is trowelled flush with the two metal beads that form the outer edge of the groove of the molding. This narrow groove alone appears as a fine line in the finished wall. This molding cannot sag—it cannot show ill-matched ends, as wooden molding usually does. Clean, unobstructive and strong—see that this modern metal molding is installed in your Home.

The Five Most Vulnerable Points.

Ask your Architect and Contractor about the Five Most Vulnerable Points in Dwellings. The Milcor Method of Metal Construction will insure you of maximum protection at these points.

Beautiful, crackproof, fireproof walls—sanitary, unobstructive Door and Window Casings instead of clumsy woodwork—pictures and decorations afloat from modern Milcor Concealed Molding, a barely perceptible metal groove instead of dirty, sagging, misfit wooden molding.



Milcor Metal Products are the distinction of the truly modern home.



To Every Room of the Home, *MILCOR* Metallic Construction Brings a Greater Measure of Comfort

The Living Room:

Crackproof, fireproof walls and ceiling on *Stay-Rib* Metal Lath—exposed corners above the Fire Place protected by *Expansion Corner Bead*—all outer and inner angles made crackproof by *Expansion Corner Bead*—windows and doors neatly trimmed with good looking, sanitary Milcor *Expansion Casings* (none of that clumsy, old fashioned, ornate, gingerbread woodwork). Wide expanses of wall, unbroken by protruding molding or dirt-collecting woodwork. Specify these Milcor Products for your Living Room.

The Dining Room:

Sanitary, vermin-proof, *Expansion Door and Window Casings*—crackproof walls and ceiling—permanent corners! Clean, attractive—and easy to keep that way. You'll want Milcor Products in your Dining Room.

The Bed Rooms:

Soundproof walls and ceiling are possible in your Home if Milcor *Stay-Rib* or *Netmesh* Metal Lath is used properly. Bedroom furniture is moved almost daily—you will want these concealed "bumpers" on all corners. *Expansion Corner Bead* will permanently protect plastered corners and deflect blows which would ruin ordinary corners. *Expansion Metal Casings* keep dust, dirt and cold from getting in at door and window jambs. The Bed Rooms of your Home deserve Milcor construction.

The Kitchen:

As a base for glazed tile in the walls of your kitchen, Milcor *Stay-Rib* is ideal because of its superior rigidity. Kitchen wall corners need the protection of *Expansion Corner Bead*. Ceiling and walls if plastered on *Netmesh* or *Stay-Rib*, will not sag or crack, in spite of clouds of steam and changes of temperature three times daily in your kitchen. The sanitary features of *Expansion Casings* and the ease with which they can be kept spotlessly

clean, make them most desirable for door and window casings in this busiest room of your Home. Specify the best for your Kitchen—your wife deserves this extra consideration—Milcor construction will be appreciated by Her.

The Bath Room:

As a reinforcing base for concrete floor in which finished tile or terrazo floor is laid, *Stay-Rib* Lath is important, as well as for the base for tile and plastered walls. Milcor lathed walls and ceiling will never sag or warp from the clouds of steam. *Expansion Door and Window Casings* won't warp or separate from the wood jamb. For permanence, have these Milcor Products in the Bath Rooms and Lavatories of your Home.

The Furnace Room:

Wherever the fire hazard requires consideration, Milcor construction is of vital importance. Cellar ceilings plastered on Milcor Metal Lath will insulate the first floor of your home from cold, dampness, fire. The Laundry Room, Fruit Cellar and other "underground" rooms can be plastered in a permanent, practical manner with Milcor Metal Lath.

The Garage:

Maximum insulation from cold, from heat, from fire or moisture is obtained in the Milcor-lathed garage. Where garages for three or four or more cars are built, with separate stalls for each car, Milcor *Netmesh* or *Stay-Rib* partitions, form a practical, economical means of separation.

Closets Under Stairway:

Fires often start in such places. If a stairway is wrecked a fire may have horrible consequences. Guard against this possibility—have all closets Milcor-lathed.

For Fire-Stops between partitions and for covering Plumbing pipes and heat ducts, specify Milcor *Netmesh*.

Milcor Fireproof Building Products
are Manufactured by

MILWAUKEE CORRUGATING COMPANY
MILWAUKEE, WISCONSIN

Kansas City, Mo.

La Crosse, Wis.

Minneapolis, Minn.

Feel free to communicate direct with our main office or any of our branches if you desire further details.

